



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 9902

Application of:

Christopher M. Benson

Art Unit: 3627

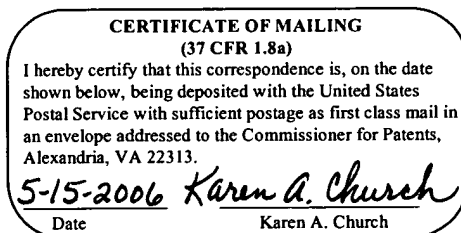
Serial No.: 10/010,983

Examiner: J. Kramer

Filed: December 6, 2001

For: CLUSTERING OF RETAIL TERMINALS

MS Appeal Brief
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



APPEAL BRIEF

Sir:

This is a third appeal brief filed in response to the final action of the Examiner dated June 2, 2004, and the subsequent action reopening prosecution on August 3, 2005, finally rejecting all of the claims in the present application. This Appeal Brief is filed in response to the Office communication of March 14, 2006, and is filed in accordance with the provisions of 37 C.F.R. 1.191. An appeal fee under 37 CFR 41.20(b)(2), \$330 as of the filing date of the Notice of Appeal, September 2, 2004, has previously been paid.

(i) REAL PARTY IN INTEREST

The real party in interest is NCR Corporation.

(ii) RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

(iii) STATUS OF THE CLAIMS

Claims 1-13 are pending in the application.

Claims 1-5 stand rejected under 35 USC 103(a), as unpatentable over Freedman (4,318,173) in view of Fernandes (5,253,345).

Claims 6-13 stand rejected under 35 USC 103(a), as unpatentable over Freedman (4,318,173) in view of Suzuki (4,360,872).

Appellant is contesting only the rejection of claims 6-13. Appellant has attached Claims 6-13 in the Appendix to this Appeal Brief.

(iv) STATUS OF AMENDMENTS

Appellant did not file a Response subsequent to the Final Rejection of June 2, 2004. Additionally, Appellant did not file a Response to the action of August 3, 2005, opting instead to

reopen this Appeal.

(v) SUMMARY OF CLAIMED SUBJECT MATTER

Claims 6-13 relate to a retail system (Claims 6-9) method of processing bulk customer history data (Claims 10-13).

As embodied in claim 6, the invention includes
a plurality of point-of-sale terminals 10-18 (Page 4, line 13; Drawing) connected to each other by a network 20 (Page 4, line 14; Drawing) for processing transactions in a first mode of operation (Page 6, lines 1-12) and for analyzing portions of bulk customer history data in a second mode of operation (Page 5, lines 12-13); and

a server (Page 4, lines 15-16) connected to the point-of-sale terminals 10-18 by the network 20 including a control processor 22 (Page 4, lines 14-15; Drawing) for dividing the bulk history data into the portions (Page 5, lines 10-11), for assigning the portions to the point-of-sale terminals 10-18 (Page 5, lines 11), for placing the point-of-sale terminals 10-18 in the second mode of operation (Page 5, lines 19-22), for receiving results of customer history data analysis from the point-of-sale terminals 10-18 (Page 5, line 13), and for performing trend analysis on the results to improve operation of the transaction establishment (Page 1, lines 10-19; Page 5, line 13).

Dependent claim 7 adds that the control processor 22 additionally determines whether the point-of-sale terminals 10-18 are idle before placing the point-of-sale terminals 10-18 in the second mode of operation (Page 6, lines 1-5).

Dependent claim 8 adds that the point-of-sale terminals 10-18 suspend the customer history data analysis of the second mode operation to process the transactions of the first mode of operation (Page 6, lines 5-7).

Dependent claim 9 adds that the control processor 22 transfers the portions of the bulk customer history data from first point-of-sale terminals operating in the first mode of operation to second point-of-sale terminals operating in the second mode of operation (Page 6, lines 8-9).

As embodied in claim 10, the invention includes

(a) dividing the bulk customer history data into portions by a control processor 22 of a server ((Page 4, lines 15-16; Page 5, lines 10-11);

(b) sending the portions of the bulk customer history data to a plurality of transaction terminals 10-18 connected to each other and to the server via a network 20 by the control processor 22 (Page 5, lines 11);

(c) causing the transaction terminals 10-18 to analyze the

portions of the bulk customer history data by the control processor 22 (Page 5, lines 19-22);

(d) obtaining results of analyzing the portions of the bulk customer history data from the transaction terminals 10-18 by the control processor 22 (Page 5, line 13); and

(e) performing trend analysis on the results by the control processor 22 (Page 1, lines 10-19; Page 5, line 13).

Dependent claim 11 adds that step (c) includes

(c-1) determining that first transaction terminals are substantially idle by the control processor 22 (Page 6, lines 1-5); and

(c-2) causing only the first transaction terminals to analyze first portions of the bulk customer history data by the control processor 22 (Page 6, lines 1-5).

Dependent claim 12 adds

(f) determining that first transaction terminals are involved in processing transactions (page 6, lines 5-9); and

(g) stopping analysis of first portions of the bulk customer history data by the first transaction terminals by the control processor 22 (Page 6, lines 5-9).

Dependent Claim 13 adds

(h) transferring the first portions of the bulk customer

history data to second transaction terminals by the control processor 22 (Page 6, lines 8-9); and

(i) causing the second transaction terminals to analyze the first portions of the bulk customer history data by the control processor 22 (Page 6, line 9).

(vi) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 6-9 stand rejected under 35 USC 103(a) as unpatentable over Freedman (4,318,173) in view of Suzuki (4,360,872).

Claims 6-13 stand rejected under 35 USC 103(a) as unpatentable over Freedman (4,318,173) in view of Balderrama (5,806,071).

(vii) ARGUMENT

Freedman (4,318,173) teaches a scheduler for a multiple computer system in which tasks are scheduled by individual processors. In particular, see Col 2, Line 51 to Col 3, Line 4.

In his background discussion, Freedman discusses a Master-Slave computer system and its drawbacks, see Col 1, lines 38-50.

Suzuki (4,360,872) teaches an electronic cash register system in which computers can enter either a registration mode or a liquidation mode. One computer may register a customer's order

and another process payment for the customer's order. Customer order information is stored with a customer number. Any of the computers may access the customer order information using the customer number.

Balderrama (5,806, 071) teaches a local area network including Point-of-Sale (POS) terminals. A manager's station is, oftentimes, also connected to the POS terminals so that data pertaining to inventory levels, revenue, sales, purchase trends, etc., can be collected and analyzed for use at the outlet and headquarters.

The rejections of claims 6-9 and 6-13 under 35 U.S.C. §103(a) is improper because the primary reference, Freedman (4,318,173), teaches away from the invention in Appellant's claims

The Examiner's rejection is based upon statements made in the background section of Freedman about Master-Slave computer systems, see Col 1, lines 38-50. Freedman indicated that such a system lacked fault tolerance and advocated instead that tasks be scheduled by individual processors. See Col 2, Line 51 to Col 3, Line 4.

One skilled in the art looking at the teachings of Freedman would be motivated against combining the Master-Slave system

taught in the background section with the electronic cash register of Suzuki to arrive at Appellant's claims because such a system would lack fault tolerance.

Therefore, Freedman is ineffective as a prior art reference to establish a rejection under 35 USC §103(a).

The rejection of claims 6-9 over Freedman in view of Suzuki is improper because the combination of references fails to teach each and every element of Appellant's claims

With respect to claim 6, neither Freedman nor Suzuki teaches

a plurality of point-of-sale terminals connected to each other by a network for processing transactions in a first mode of operation and for analyzing portions of bulk customer history data in a second mode of operation; and

a server connected to the point-of-sale terminals by the network including a control processor for dividing the bulk history data into the portions, for assigning the portions to the point-of-sale terminals, for placing the point-of-sale terminals in the second mode of operation, for receiving results of customer history data analysis from the point-of-sale terminals, and for performing trend analysis on the results to improve operation of the transaction establishment.

Neither reference mentions processing of bulk customer history data. Suzuki teaches two modes of operation, but neither

includes processing of bulk customer history data.

With respect to claim 7, neither Freedman nor Suzuki teaches
wherein the control processor additionally determines
whether the point-of-sale terminals are idle before placing
the point-of-sale terminals in the second mode of operation.

Neither reference teaches giving preference to a first mode
of operation involving transaction processing over a second mode
of operation involving processing of bulk customer history data
by waiting till the point-of-sale terminals are idle before
switching to the second mode of operation.

With respect to claim 8, neither Freedman nor Suzuki teaches
wherein the point-of-sale terminals suspend the
customer history data analysis of the second mode operation
to process the transactions of the first mode of operation.

Neither reference teaches giving preference to a first mode
of operation involving transaction processing over a second mode
of operation involving processing of bulk customer history data
by suspending the second mode in favor of the first mode to
process transactions.

With respect to claim 9, neither Freedman nor Suzuki teaches
wherein the control processor transfers the portions of
the bulk customer history data from first point-of-sale

terminals operating in the first mode of operation to second point-of-sale terminals operating in the second mode of operation.

Neither reference teaches giving preference to a first mode of operation involving transaction processing over a second mode of operation involving processing of bulk customer history data by transferring portions of bulk customer history data from first point-of-sale terminals operating in the first mode of operation to second point-of-sale terminals operating in the second mode of operation.

The rejection of claims 6-13 over Freedman in view of Balderrama is improper because the combination of references fails to teach each and every element of Appellant's claims

With respect to claim 6, neither Freedman nor Balderrama teaches

a plurality of point-of-sale terminals connected to each other by a network for processing transactions in a first mode of operation and for analyzing portions of bulk customer history data in a second mode of operation; and

a server connected to the point-of-sale terminals by the network including a control processor for dividing the bulk history data into the portions, for assigning the portions to the point-of-sale terminals, for placing the point-of-sale terminals in the second mode of operation, for receiving results of customer history data analysis from the

point-of-sale terminals, and for performing trend analysis on the results to improve operation of the transaction establishment.

Neither reference mentions processing of bulk customer history data. Balderrama mentions data pertaining to inventory levels, revenue, sales, and purchase trends, but does not mention customer history data. Regardless, Balderrama teaches that the manager station *collects* and *analysis* the data, not the POS terminals.

With respect to claim 7, neither Freedman nor Balderrama teaches

wherein the control processor additionally determines whether the point-of-sale terminals are idle before placing the point-of-sale terminals in the second mode of operation.

Neither reference teaches giving preference to a first mode of operation involving transaction processing over a second mode of operation involving processing of bulk customer history data by waiting till the point-of-sale terminals are idle before switching to the second mode of operation.

With respect to claim 8, neither Freedman nor Balderrama teaches

wherein the point-of-sale terminals suspend the customer history data analysis of the second mode operation to process the transactions of the first mode of operation.

Neither reference teaches giving preference to a first mode of operation involving transaction processing over a second mode of operation involving processing of bulk customer history data by suspending the second mode in favor of the first mode to process transactions.

With respect to claim 9, neither Freedman nor Balderrama teaches

wherein the control processor transfers the portions of the bulk customer history data from first point-of-sale terminals operating in the first mode of operation to second point-of-sale terminals operating in the second mode of operation.

Neither reference teaches giving preference to a first mode of operation involving transaction processing over a second mode of operation involving processing of bulk customer history data by transferring portions of bulk customer history data from first point-of-sale terminals operating in the first mode of operation to second point-of-sale terminals operating in the second mode of operation.

With respect to claim 10, neither Freedman nor Balderrama

teaches

- (a) dividing the bulk customer history data into portions by a control processor of a server;

- (b) sending the portions of the bulk customer history data to a plurality of transaction terminals connected to each other and to the server via a network by the control processor;

- (c) causing the transaction terminals to analyze the portions of the bulk customer history data by the control processor;

- (d) obtaining results of analyzing the portions of the bulk customer history data from the transaction terminals by the control processor; and

- (e) performing trend analysis on the results by the control processor.

Neither reference mentions processing of bulk customer history data by transaction terminals as claimed.

With respect to claim 11, neither Freedman nor Balderrama teaches

- (c-1) determining that first transaction terminals are substantially idle by the control processor; and

- (c-2) causing only the first transaction terminals to analyze first portions of the bulk customer history data by the control processor.

Neither reference teaches analyzing of bulk customer history data only by idle transaction terminals.

With respect to claim 12, neither Freedman nor Balderrama teaches

(f) determining that first transaction terminals are involved in processing transactions; and

(g) stopping analysis of first portions of the bulk customer history data by the first transaction terminals by the control processor.

Neither reference teaches stopping analysis of bulk customer history data by transaction terminals involved with processing transactions.

With respect to claim 13, neither Freedman nor Balderrama teaches

(h) transferring the first portions of the bulk customer history data to second transaction terminals by the control processor; and

(i) causing the second transaction terminals to analyze the first portions of the bulk customer history data by the control processor.

Neither reference teaches stopping analysis of bulk customer history data by transaction terminals involved with processing transactions, and transferring the bulk customer history data to other transaction terminals for analysis.

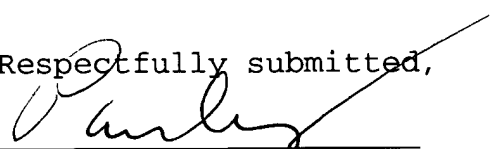
CONCLUSION

Appellant respectfully submits that the Examiner has failed

to establish a prima facie case of obviousness and that the rejection of claims 6-13 is improper.

Appellant further submits that claims 6-13 are allowable and respectfully requests that the rejection of claims 6-13 by the Examiner be reversed by the Board.

Respectfully submitted,



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(viii) CLAIMS APPENDIX

6. A retail system in a transaction establishment comprising:

a plurality of point-of-sale terminals connected to each other by a network for processing transactions in a first mode of operation and for analyzing portions of bulk customer history data in a second mode of operation; and

a server connected to the point-of-sale terminals by the network including a control processor for dividing the bulk history data into the portions, for assigning the portions to the point-of-sale terminals, for placing the point-of-sale terminals in the second mode of operation, for receiving results of customer history data analysis from the point-of-sale terminals, and for performing trend analysis on the results to improve operation of the transaction establishment.

7. The system of claim 6, wherein the control processor additionally determines whether the point-of-sale terminals are idle before placing the point-of-sale terminals in the second mode of operation.

8. The system of claim 6, wherein the point-of-sale terminals suspend the customer history data analysis of the second mode operation to process the transactions of the first mode of operation.

9. The system of claim 6, wherein the control processor transfers the portions of the bulk customer history data from first point-of-sale terminals operating in the first mode of operation to second point-of-sale terminals operating in the second mode of operation.

10. A method of processing bulk customer history data comprising:

(a) dividing the bulk customer history data into portions by a control processor of a server;

(b) sending the portions of the bulk customer history data to a plurality of transaction terminals connected to each other and to the server via a network by the control processor;

(c) causing the transaction terminals to analyze the portions of the bulk customer history data by the control processor;

(d) obtaining results of analyzing the portions of the bulk customer history data from the transaction terminals by the control processor; and

(e) performing trend analysis on the results by the control processor.

11. The method of claim 10, wherein step (c) comprises the substeps of:

(c-1) determining that first transaction terminals are substantially idle by the control processor; and

(c-2) causing only the first transaction terminals to analyze first portions of the bulk customer history data by the control processor.

12. The method of claim 10, further comprising the steps of:

(f) determining that first transaction terminals are involved in processing transactions; and

(g) stopping analysis of first portions of the bulk customer history data by the first transaction terminals by the control processor.

13. The method of claim 12, further comprising the steps of:

(h) transferring the first portions of the bulk customer history data to second transaction terminals by the control processor; and

(i) causing the second transaction terminals to analyze the first portions of the bulk customer history data by the control processor.

(ix) EVIDENCE APPENDIX

No evidence pursuant to §§1.130, 1.131, or 1.132 or any other evidence has been entered by the Examiner or relied upon by Appellant.

(x) RELATED PROCEEDINGS APPENDIX

There are no related decisions rendered by a court or the Board or copies of such decisions.